

Page 1

Calculations
Lowes
72-0129/63162
7/17/2014

500 hours	Facility numbers	Agreed hours limit	500
Max agreed fuel usage (written)	13500 gall/year	Horse power=	550.0
Max. Fuel Usage = ? gal/hr	10.25137844 gall/hour	kW-hr=	410.1
Max agreed gal/yr (calc) =	5125.689222 gall/year	hours/year	1316.9
Heat Input based on facility agreement letter dated 9-17-09	1.4	MMBtu/hour	

Diesel has 19,3000 btu/lb or 136,567 btu/gal and 7.076 lb/gal density

Potential/Actual Emissions from IC Engine/Diesel Fuel (Emission factors supplied by facility and EPA)

	Actual Emissions (lb/hr)	Potential Emissions (lb/hr)	Regulatory Limit (lb/hr)	Actual Emissions at 500 hours per year (TPY)	Regulatory Limit at 500 hr/yr (ton/yr)
PM	0.1	0.18	0.18	0.021	0.045
SO2	0.00	1.13	1.13	0.00	0.28
CO	0.6	3.16	3.16	0.1	0.8
VOC	0.5	0.49	0.49	0.1	0.1
NOx+ VOC	3.6	3.61	3.61	0.9	0.9

Allowable Sulfur Dioxide Emissions, TAPCR 1200-3-14-.01(3)

Company is required by EPA to meet 15 ppm standard

Allowable = gallons per hour time density times parts per million divided by one million

Allowable at 500 hours = 0.001088081 Pounds per hour 0.00027202 tons per year

Potential/Actual Emissions from IC Engine/Diesel Fuel (Emission factors supplied by AP42 and EPA)

	EPA Requirement in g/kw-hour	AP-42 in pounds per MMBtu/hr	EPA Requirement in pounds / hour	Facility numbers in pounds / hour with 500 ppm sulfur fuel
PM	0.2	0.31	0.18	0.1
SO2	*	0.29	*	0.1
CO	3.5	0.95	3.16	0.6
HC	*	0.35	*	0.028
NOx	4.0	4.41	3.61	3.6

Model year: 2007

Certificate of Conformity dated 8-25-06 reports that all engine emissions meet EPA standards.

Engine was installed in November 2007 and manufactured in August 2007.